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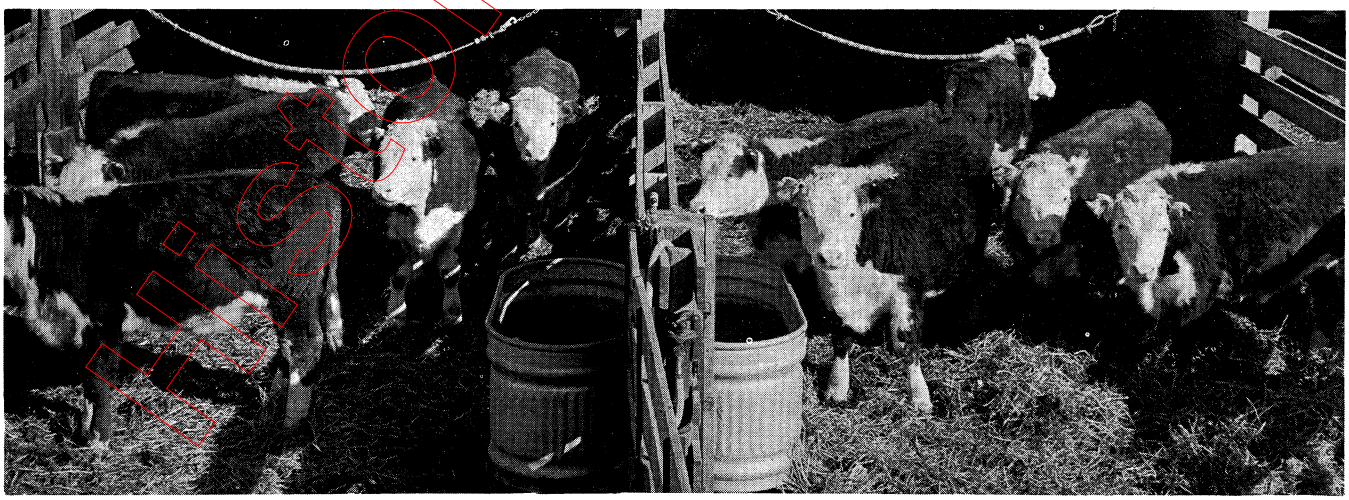
Ever notice that some animals gain much faster in the feedlot than others? Feeder calves of the same breed and from the same farm, fed the same ration, frequently differ as much as 0.80 pound in feedlot daily gain. Calves from different farms or ranches also vary widely in rate of gain and feed costs per pound of gain.

What causes these differences? Extensive research has shown that gainability, and feed efficiency are highly heritable. This means that feedlot rate of gain and feed costs per pound of gain depend to a large extent on the genetic qualities of the sires and dams in the herd.

Why are differences in daily gain important? Research has also suggested that faster-gaining feeders generally net more profit in the feedlot. How? There are two reasons:

1. Due to the high relationship between rate of gain and feed efficiency, faster-gaining steers require less pounds of feed per pound of gain. Research has shown that a 0.10 pound increase in daily gain results in a savings of about 35 pounds of feed for each 100 pounds of feedlot gain.

2. Faster-gaining feeders reach market weights and grades in a shorter feedlot period, thereby decreasing overhead or fixed costs (interest, labor, veterinary expense, etc.) These costs are often overlooked in figuring costs of gain.



Cattle which look alike do not necessarily return the same profit!

Beef Section • Animal Sciences Department

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Let's assume that two groups of feeder steers are started on feed at an average weight of 450 pounds and are to be slaughtered at 1,050 pounds. Therefore, 600 pounds must be put on in the feedlot. If group A gains 2.00 pounds per day and Group B gains 2.40, then the pounds of feed saved by Group B for each 100 pounds of feedlot gain would be 140 pounds of feed (0.40 pounds of daily gain X 10 X 35 pounds of feed.)

Since 600 pounds of gain must be added in the feedlot: 6.00 cwt. x 140 lbs. of feed = 840 lbs. of feed saved per steer. At 2 1/2¢ per pound of feed, this represents a savings in feed costs of $21.00 per steer.

The difference in fixed costs from feeding the two groups can be figured from the difference in days on feed:

Group A (2.00 lbs./day) = 300 days
Group B (2.40 lbs./day) = 250 days

Difference = 50 days

Group B would be marketed 50 days sooner than Group A. Estimating the fixed costs at approximately 9¢ per day, this means $4.50 less expense per steer in feeding the faster-gaining animals.

Combining the savings in feed costs ($21.00) and fixed costs ($4.50) gives a total reduction in expenses of $25.50 per steer.

How much extra would the faster-gaining steers cost and how would this affect the gross profit? Even if a premium of 2¢ per pound were paid for the steers in Group B, these calves would cost only $9.00 more per head. This would still leave a difference in net profit of about $16.50. Groups of animals can also differ greatly in the quantity and quality of salable meat produced per animal. Certainly no cattle feeder can afford to overlook these differences since this could mean the difference between profit or loss.

Feeding fast-gaining animals certainly does not mean sacrificing quality for gaining ability. Some feeder steers are capable of fast, efficient gains and also turn out high quality, desirable carcasses. However, these cattle cannot be accurately identified by visual appraisal.

Where can these faster-gaining, more efficient steers be found? Commercial calf producers who are interested in making the most improvement in their herds are using production testing programs to increase the gainability and grade of their calves. Good commercial cattlemen are also buying fast-gaining, top quality, performance tested bulls that sire calves which are more profitable for the cattle feeder.

In all cattle, wide differences exist in genetic ability. Not all cattle carrying the tag "performance tested" will necessarily be faster-gaining, higher-grading, or more efficient. However, performance records are the best indication that the breeder is striving for herd improvement. If performance tested steers are purchased, it would be advisable, if possible, to know the past feedlot and carcass performance of the cattle from this herd.

The beef cattle business is fast becoming very competitive. Performance testing and the use of better beef bulls are directed toward improving the profitability of beef cattle for all people involved with the beef industry, particularly the calf producer and cattle feeder.

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